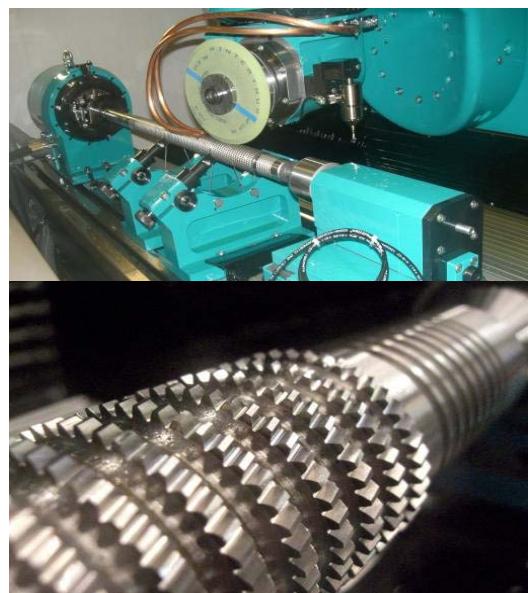


## Profiled cyl. broach Ø 40, 44 gaps

A14-220

The profile of the broach is ground with two shaped corundum wheels for roughing and finishing. The total cycle time includes the regular dressing of the wheels. It's basicly possible to produce the profile straight (aligned to the turning axis of the broach) or as a helix. The profile of this example has a constant inclination along the total cutting length of the tool. A seperate clearance on each tooth is producible as well.



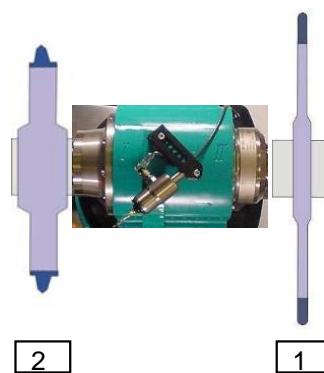
### 1. Cycletime for Production

Workpiece:	Diameter 40mm; Cutting length 540mm; Nbr of gaps 44; Helix 18° Material HSS				
Operations	Probe	Prf Rough	Prf Pgrd	Prf fin	Dress
Feed [mm/Min]	5000	12000	15000	15000	100
Power [kW]		4	2	2	1
Cutting feed [m/s]		40	40	40	30
Used wheels		1	2	2	
Grinding time [s]	6	6634	3067	3067	2962
Total cycle time	262 Min 14				

The cycle times are indicative. Material to be ground, grinding wheels, coolants can influence the cycle times considerably.

### 2. Used Grinding Wheels

1	DXF Ø250 11C120
2	DXF Ø200 54A180



### 3. Machine and Software Requirements

Machines: 6 axes CNC grinders : Corvus BBA Coolant: Synthetic Oil, pressure 6 bar

Control: Fanuc 31i

Software: Quinto 5

Accessories: Dressing unit, Hydraulic tailstock, Support

Responsible engineer: SIS. 12.2.10

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